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**BEFORE THE BOARD OF PATENT APPEALS  
AND INTERFERENCES**

Application Number: 09/992,974  
Filing Date: November 19, 2001  
Appellant(s): BIRKHOELZER ET AL.

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Steven Noll  
For Appellant

**SUPPLEMENTAL  
EXAMINER'S ANSWER**

This is in response to the supplemental appeal brief filed July 16, 2009 appealing from the  
Office action mailed January 31, 2007.

**(1) Real Party in Interest**

A statement identifying by name the real party in interest is contained in the brief.

**(2) Related Appeals and Interferences**

The examiner is not aware of any related appeals, interferences, or judicial proceedings which will directly affect or be directly affected by or have a bearing on the Board's decision in the pending appeal.

**(3) Status of Claims**

The statement of the status of claims contained in the brief is correct.

**(4) Status of Amendments After Final**

The appellant's statement of the status of amendments after final rejection contained in the brief is correct.

**(5) Summary of Claimed Subject Matter**

The summary of claimed subject matter contained in the brief is correct.

**(6) Grounds of Rejection to be Reviewed on Appeal**

The appellant's statement of the grounds of rejection to be reviewed on appeal is correct.

**(7) Claims Appendix**

The copy of the appealed claims contained in the Appendix to the brief is correct.

**(8) Evidence Relied Upon**

|           |               |         |
|-----------|---------------|---------|
| 6,321,113 | Parker et al  | 11-2001 |
| 6,629,131 | Choi          | 09-2003 |
| 6,304,898 | Shiigi        | 10-2001 |
| 6,829,478 | Layton et al  | 11-2004 |
| 6,501,979 | Manning et al | 12-2002 |

5,662,109 Hutson 09-1997

Microsoft Corporation, *Microsoft Computer Dictionary Fifth Edition*, 5th Edition, pages 131, 276, 294, and 388

### **(9) Grounds of Rejection**

The following ground(s) of rejection are applicable to the appealed claims:

#### ***Claim Rejections - 35 USC § 102***

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

2. Claims 1-14 are rejected under 35 U.S.C. 102(e) as being anticipated by Parker et al (U.S. Patent No. 6,321,113).

3. As per claim 1, Parker et al teach a medical system architecture comprising:

an imaging modality for acquiring medical examination images of an examination subject (**column 1, lines 60-67, Fig. 1, element 22, and column 3, lines 42-64; AED**);

a workstation (**column 1, lines 60-67, Fig. 1, 26, and column 4, lines 8-10; rescue scene computer**) selected from the group of workstations consisting of workstations for acquiring said examination images (**column 3, lines 46-64; ECG**), workstations for sending said examination image, and workstations for receiving said examination images (**column 3, lines 46-64 and column 1, line 61-column 2, line 8**);

a system connected to said workstation for transmitting said examination images to at least one location remote from said workstation (**column 3, lines 46-64, column 1, line 61-column 2, line 20 and column 4, lines 10-25; data is transmitted via links 30 or 32 to base computer**); and

a call system allocated to said workstation for transmitting messages together with data representing said medical images to a remote location (**fig 1, column 3, lines 46-64 and column 1, line 61-column 2, line 20; data is transmitted to base computer at a central emergency medical system center for review by reviewer**).

4. As per claim 2, Parker et al teach a workstation also processes data associated with said examination images (**abstract, column 1, line 60 – column 2, lines 20**), and further comprising a memory connected to said system which stores said data and said examination images in allocated fashion (**column 3, lines 46-64 and column 4, lines 1-9**).

5. As per claim 3, Parker et al teach a call system allows manually modifiable entries of auxiliary information to ensue automatically from object types stored in a data bank (**column 2, lines 4-9, abstract, Figures 2-9, and column 4, line 47 – column 5, line 26**).

6. As per claim 4, Parker et al teach a call system comprises a user front end (**column 2, lines 4-9**), a communication service (**Figure 1, 30, 32**) and a mobile communication device (**Figure 1**).

7. As per claim 5, Parker et al teach a user front end is integrated in an application at said workstation (**column 1, line 60- column 2, line 10**).

8. As per claim 6, Parker et al teach communication services comprises a communication server and a communication system (**column 4, lines 20-25 and column 3, 28-35**).

9. As per claim 7, Parker et al teach a call system that allows a manually modifiable entry of a message recipient to ensue automatically in said message (**column 4, line 47 –column 5, line 15 and Figure 2-9**).

10. As per claim 8, Parker et al teach a call system allows a manually modifiable entry of a current patient, being examined with said modality, to ensue automatically in said message (**column 4, line 47 –column 5, line 15 and Figure 2-9**).

11. As per claim 9, Parker et al teach a manually modifiable entry of a current procedure being executed by said modality to ensue automatically in said message (**column 4, line 47 – column 5, line 15 and Figure 2-9**).

12. As per claim 10, Parker et al teach a call system that allows entry of an arbitrary text as specific auxiliary information in said message (**column 1, line 60 – column 2, line 20 and column 4, lines 17-36**).

13. As per claim 11, Parker et al teach a call system comprises a mobile communication device with a display (**Figure 1 and column 3, lines 35-41**).

14. As per claim 12, Parker et al teach a call system includes a voice input unit at said workstation allowing a voice input to be transmitted to said communication device as an audio data file, and wherein said communication device comprises an audio transducer allowing emission of said voice input at said communication device (**column 3, lines 41-64**).

15. As per claim 13, Parker et al teach a workstation has a monitor on which said examination images are displayed, and wherein said call system is connected to said workstation to cause a communication window to be overlaid on said examination images at said monitor (**column 3, lines 35-41, column 4, lines 43-67 and Figures 1-2**).

16. As per claim 14, Parker et al teach a call system comprises a mobile communication device with a display (**Figure 1**) and an information return channel from said communication

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device to said workstation allowing information to be transmitted from said communication

device to said workstation (**Figure 1 and column 4, lines 17-25; communication link**).

***Claim Rejections - 35 USC § 103***

17. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all

obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

18. Claim 15 is rejected under 35 U.S.C. 103(a) as being unpatentable over Parker et al (U.S. Patent No. 6,321,113) as applied to claim 1 above, and further in view of Choi (U.S. Patent No. 6,629,131).

19. As per claim 15, Parker et al teach fail to teach transmitting a confirmation of receipt of said message to said workstation after said message has been read.

20. However, Choi teaches a method with a function of reception confirmation after the read of the message (**abstract, Figure 3, and column 2, lines 59-column 3, line 11**). It would have been obvious to one of the ordinary skill in the art at the time of the applicant's invention to combine the teachings of Parker et al and Choi because Choi's use of reception confirmation in Parker et al's system would ensure that an expert or physician has read the sent medical information within a period of time in order to provide quick rescue of patients. If no response, rescue team can resend the vital information to other experts.

21. Claims 16-19 and 22 are rejected under 35 U.S.C. 103(a) as being unpatentable over Parker et al (U.S. Patent No. 6,321,113) as applied to claim 1 above, and further in view of "Official Notice".

22. As per claim 16, Parker et al fail to teach the workstation communicates with said communication service via Corba technology.

23. However, "Official Notice" is taken that both the concept and advantages of using Corba technology is well known and expected in the art as evident in *Microsoft Computer Dictionary 5<sup>th</sup> Edition*, page 131. It would have been obvious to one of the ordinary skill in the art to use Corba technology in Parker et al's system because it would allow programs that are written in two different programming languages to communicate with each other, for example, an ECG and a workstation would be able to communicate without the need for additional software.

24. As per claim 17, Parker et al fail to teach the workstation communicates with said communication service via Instant Messaging technology.

25. However, "Official Notice" is taken that both the concept and advantages of using Instant Messaging technology is well known and expected in the art as evident in *Microsoft Computer Dictionary 5<sup>th</sup> Edition*, page 276. It would have been obvious to one of the ordinary skill in the art at the time of the applicant's invention to use Instant Messaging in Parker et al's system because it would allow a rescue member to message a physician regarding a patient's status.

26. As per claim 18, Parker et al fail to teach the workstation communicates with said communication service via Java Enterprise Beans technology.

27. However, "Official Notice" is taken that both the concept and advantages of using Java Enterprise Beans technology is well known and expected in the art as evident in *Microsoft Computer Dictionary 5<sup>th</sup> Edition*, page 294. It would have been obvious to one of the ordinary skill in the art at the time of the applicant's invention to use Java Enterprise Beans technology in Parker et al's system because it would allow for a workstation that transmits medical data using



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a Java browser to run on any platform allowing for a rescue member to send vital medical data without complications.

28. As per claim 19, Parker et al fail to teach the user front end comprises a Java applet in a browser.

29. However, "Official Notice" is taken that both the concept and advantages of using Java applet in a browser is well known and expected in the art as evident in *Microsoft Computer Dictionary 5<sup>th</sup> Edition*, page 294. It would have been obvious to one of the ordinary skill in the art at the time of the applicant's invention to use Java applet in a browser in Parker et al's system because it adds multimedia capability and interactivity to any webpage, allowing medical data sent on a webpage to a physician to include interactive data such as an ECG result or voice from a patient.

30. As per claim 22, Parker et al fail to teach a beeper with a display.

31. However, "Official Notice" is taken that both the concept and advantages of using a beeper is well known and expected in the art as evident in *Microsoft Computer Dictionary 5<sup>th</sup> Edition*, page 388. It would have been obvious to one of the ordinary skill in the art at the time of the applicant's invention to use a beeper in Parker et al's system because it would provide a physician or remote expert mobility by notifying them of a medical emergency without the need to physically locate them, which would take crucial time during a life and death situation.

32. Claims 20 is rejected under 35 U.S.C. 103(a) as being unpatentable over Parker et al (U.S. Patent No. 6,321,113) as applied to claim 1 above, and further in view of Shiigi (U.S. Patent No. 6,304,898).

33. As per claims 20, Parker et al fail to teach a WAP phone.

34. However, Shiigi teaches the use of a WAP phone (**column 1, lines 35-50, column 3, lines 45-58, and column 8, line 30**). It would have been obvious to one of the ordinary skill in

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the art at the time of the applicant's invention to combine the teachings of Parker et al and Shiigi because Shiigi's use of a WAP phone in Parker et al's system because it would provide a physician or remote expert mobility by notifying them of a medical emergency without the need to physically locate them, which would take crucial time during a life and death situation.

35. Claims 21 is rejected under 35 U.S.C. 103(a) as being unpatentable over Parker et al (U.S. Patent No. 6,321,113) in view of Layton et al (U.S. Patent No. 6,829,478).

36. As per claim 21, Parker fails to teach an SMS phone.

37. However, Layton et al teach the use of SMS phone (**column 3, lines 34-52**). It would have been obvious to one of the ordinary skill in the art at the time of the applicant's invention to combine the teachings of Parker et al and Layton et al because Layton et al's use of a SMS phone in Parker et al's system because it would provide a physician or remote expert mobility by notifying them of a medical emergency without the need to physically locate them, which would take crucial time during a life and death situation.

#### **(10) Response to Argument**

Argument A: *There is no disclosure in the Parker et al reference describing the generation or transmission of images in general, nor any disclosure of the transmission of medical images or examination images.*

In response, the Examiner respectfully disagrees. It is initially noted that the Appellant has failed to define the term *medical examination images* in the Appellant's specification. Parker et al teach a method and system for managing cardiac rescue events using a rescue scene computer to obtain patient and incident data at the rescue scene and then marry that data with ECG rescue data and automated external defibrillator (AED) rescue data. All of this data is then simultaneously transmitted to a base computer at an emergency medical center for review. Accordingly, a reviewer at the base computer can immediately review the ECG and AED

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performance in context with patient and incident data (**see abstract**). The system includes an AED, AED data card and rescue scene computer (**see fig 1, column 3, lines 28-41**). The AED records ECG data on a patient. The ECG data is then transferred into the rescue scene computer. The rescue scene computer then transmits the ECG data via a communication link to a base computer at the central emergency medical system. A reviewer then can immediately review the ECG data (**see abstract, fig 1, column 3, lines 45-column 4, lines 25, column 1, line 60-column 2, line 3; also element 56, figs 3-9 shows the ECG data as an "image"**). Thus, the ECG data in Parker et al is a medical examination image used to examine the patient during a medical emergency.

*Argument B: ECG does not represent a medical examination image as understood by those of ordinary skill in the art. Those of ordinary skill in the field of medical imaging do not consider an ECG to fall into the category of a "medical examination image".*

In response, the Examiner respectfully disagrees. In page 9 of the remarks section of the July 14, 2005 amendment, as well as in the Brief, the Appellant has requested the Examiner provide evidentiary support for the Examiner's position that an ECG is known to be an imaging modality as that term is commonly understood and used by those with ordinary skill in the field of medical technology. In the subsequent action, the Examiner provided Hutson (US Patent No. 6,501,979) and Manning et al (US Patent No. 6,501,979) for support.

- **Hutson** is in the field of medical technology and is directed to systems and methods for imaging bodily tissue.

**Column 3, lines 23-38** reads:

The present invention relates to the imaging of bodily tissues, and particularly to a system and method for enabling early detection of carcinomas and other types of diseased bodily tissue. The system and method of the present invention correlate data from multiple modalities for medical imaging, including, mammography and other radiological procedures, ultrasound imaging, including pulsed and CW doppler, MRI, MRI spectroscopy (MRIS), fluoroscopy,

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angiography, computer tomography (CT), ultrafast computer tomography (UFCT), **electrocardiography (EKG)**, **echocardiography (ECG)**, electroencephalography (EEG), positron emission tomography (PET), single positron emission tomography (SPECT) and other medical sensing systems. Through the intracorrelation and intercorrelation of multiple modalities, more effective use can be made of these techniques.

As evident from the above citation, medical imaging modalities can include ECG to obtain medical imaging data (ECG data).

- **Manning et al** is in the field of medical technology and is directed to methods and apparatus for medical imaging of a patient.

**Column 2, lines 54-65** reads:

As used herein, it is to be understood that a "**medical imaging modality**" is any imaging modality that acquires **imaging data** by a process that can be disturbed by body motions, and, therefore, that advantageously takes heart motions into account when imaging organs that are directly or indirectly affected by such heart motions. This invention is most advantageously applied to those imaging modalities the practice of which generates noise and distortions of **electrocardiogram (ECG)** signals measured from a patient during imaging. Preferably, this invention is applied to magnetic resonance (MR) imaging, or to computer tomographic (CT) x-ray imaging, or to nuclear medicine imaging.

As evident from the above citation, medical imaging modalities is any imaging modality that acquires imaging data. Such imaging data can include ECG signals.

From the above evidentiary citations, it is clear that ECG is an imaging modality and ECG data represents a medical examination image as understood by those of ordinary skill in the art.

### **Exhibits A-C**

The Appellant is arguing that since ECG is not included or listed in the definitions provided in the exhibits, then ECG is not a medical examination image. However, the Examiner disagrees. The exhibits are merely a few references from a plethora of medical references available. The Examiner has provided references to the contrary. Simply because the definitions

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provided in the exhibits fail to mention an ECG does not mean that ECG are excluded as medical examination images. The exhibits did not contain explicit language excluding ECG as medical examination images and therefore do not invalidate the Examiner's references or position.

**(11) Related Proceeding(s) Appendix**

No decision rendered by a court or the Board is identified by the examiner in the Related Appeals and Interferences section of this examiner's answer.

For the above reasons, it is believed that the rejections should be sustained.

Respectfully submitted,

/Ramsey Refai/

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